
Subject: Re: what is the best way to do a surface (or 2D) interpolation?

Posted by [Vince Hradil](#) on Tue, 23 Sep 2008 19:46:30 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Sep 23, 12:25 pm, Brian Larsen <balar...@gmail.com> wrote:

>> Here's a way to get verts:

>

>> sz = size(array)

>> nx = sz[0]

>> ny = sz[1]

>> nz = sz[2]

>> ns = sz[sz[0]+2]

>> verts = findgen(ns)

>> verts = transpose([[verts mod nx], [verts/nx mod ny], [verts/nx/

>> ny]])

>

>> BTW, I'd like to find a faster way, if there is one.

>

> This looks like the right thing but doesn't seem to give the right

> answer (or am I using it wrong?)

>

> ;; this is my data

> array=findgen(15,3)

> ;; and get the verts

> sz = size(array)

> nx = sz[0]

> ny = sz[1]

> nz = sz[2]

> ns = sz[sz[0]+2]

> verts = findgen(ns)

> verts = transpose([[verts mod nx], [verts/nx mod ny], [verts/nx/

> ny]])

>

> IDL> print, verts

> 0.00000 0.00000 0.00000

> 1.00000 0.500000 0.0333333

> 0.00000 1.00000 0.0666667

> 1.00000 1.50000 0.100000

> 0.00000 2.00000 0.133333

> 1.00000 2.50000 0.166667

>

> The z values that are here are not in my original array...

>

> Sorry to hijack your post Paula,

>

> Brian

>

> -----

- > Brian Larsen
- > Boston University
- > Center for Space Physics<http://people.bu.edu/balarsen/Home/IDL>

My example is for 3d arrays only! For 2d arrays, just use:

```
nx = sz[1]
ny = sz[2]
verts = lindgen(nx*ny)
verts = transpose( [ [verts mod nx], [verts/nx] ] )
```

There was a typo in the original, too. nx=sz[1] not sz[0], and so on.

Yes, it should be lindgen...
